

Split

Work Order ID 68216-2



Page 1

Friday, April 08, 2011 3:00:04 PM

Item ID: D3955-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Doubler Assembly

Start Date: 4/8/2011 Start Qty: 7.00



Cust Item ID:

Required Date: 4/12/2011 Req'd Qty: 7.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date: 11-04-8

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3955

A

100

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3955-1

Dwg Rev: A

Prog Rev: A

2-Debur if necessary

B1-4-11

8

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B1-4-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 68216

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Page 2

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

ml 11 04 12 (8)

130



Small Fab

Small Fab

Memo

1- C'sink holes as per dwg

2- Deburr if necessary

0.00

0.00

SPC 4/04/15 (8)

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

ml 11 04 15 (8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Work Order ID 68216

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Required Date: 4/12/2011 Req'd Qty: 7.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

8 8 11-4-18

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

8 BR 11-4-18.

170

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

8 11/04/27 (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 68216

Friday, April 08, 2011 3:00:04 PM



Page 4

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Start Date: 4/8/2011 Start Qty: 7.00



Cust Item ID:

Required Date: 4/12/2011 Req'd Qty: 7.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

0.00



Small Fab

Memo

0.00

Small Fab

1- Assemble nut plate as per dwg

4/5/04/27 (3)

190

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

8/4/04/27

(+3)

200

0.00



Packaging

Identify as per dwg & Stock Location: 98

Memo

0.00

Packaging

11/4/27 SP 30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Friday, April 08, 2011 3:00:04 PM



Page 5

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Cust Item ID:

Required Date: 4/12/2011 Req'd Qty: 7.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/4/28
MF
11-04-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, April 11, 2011 10:06:32 AM

Page 1

Work Order ID: 68216

Parent Item: D3955-041

Parent Item Name: Doubler Assembly



Start Date: 4/8/2011

Required Date: 4/12/2011

Start Qty: 7.00

Required Qty: 7.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.063

Purchased

No

100

sf

376 0000

0.3553

2.618

3.



6061-T6 .063 Sheet

181-4-11

Location

Loc Qty

Loc Code

MAT021

376

113608

4

116308

36

117285

336

113608

ⓧ

MS21086L3

Purchased

No

180

Each

5.0000

1

7



Nut Plate



EP 11/04/18

Location

Loc Qty

Loc Code

ST304

5

112219

5

1117519

3

5

MS20427M3-3

Purchased

No

180

Each

1.782 000

2

14



Rivet



EP 11/04/18

Location

Loc Qty

Loc Code

ST318

1782

117206

1782

16

DART AEROSPACE LTD		Work Order:	48214
Description: Doubler		Part Number:	D3955-1
Inspection Dwg: D3955	Rev: A	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	.132	*		V 1B02	
Ø0.201	+0.005/-0.001	.205	*		V	
0.750	+/-0.010	.750	>		V	
1.000	+/-0.010	1.001	>		V	
1.250	+/-0.010	1.251	>		V	
1.375	+/-0.010	1.374	>		V	
2.38	+/-0.030	2.378	>		V	
0.613	+/-0.010	.610	>		V	
1.313	+/-0.010	1.310	>		V	
2.063	+/-0.010	2.065	>		V	
2.563	+/-0.010	2.562	>		V	
3.063	+/-0.010	3.067	>		V	
4.813	+/-0.010	4.815	>		V	
6.313	+/-0.010	6.310	>		V	
7.313	+/-0.010	7.313	>		V	
7.813	+/-0.010	7.813	>		V	
8.199	+/-0.010	8.196	>		PROW 502	
8.449	+/-0.010	8.444	>		P	
9.188	+/-0.010	9.189	>		P	
9.438	+/-0.010	9.436	>		P	
10.413	+/-0.010	10.415	>		P	
10.75	+/-0.030	10.747	>		P	
0.063	+/-0.010	.062	>		V	

Measured by:	IB
Date:	11-4-11

Audited by:	[Signature]
Date:	11.04.12

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.07.29	New Issue	KJ [Signature]	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

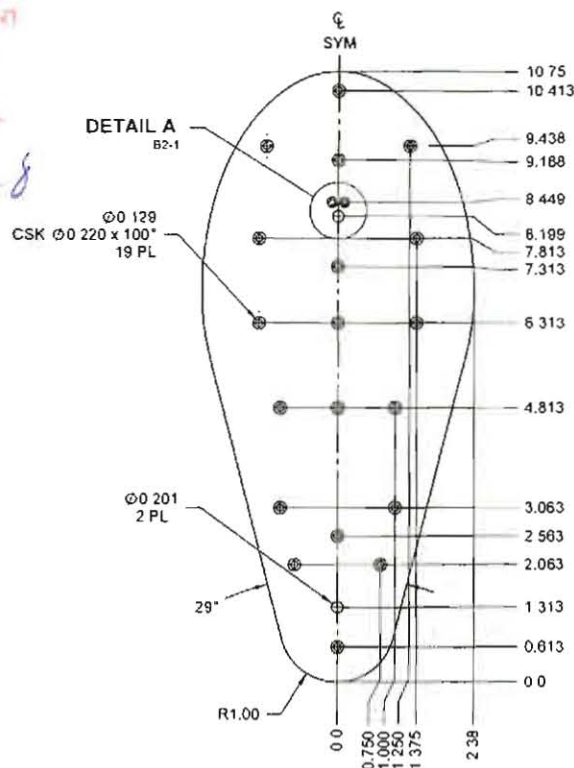
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

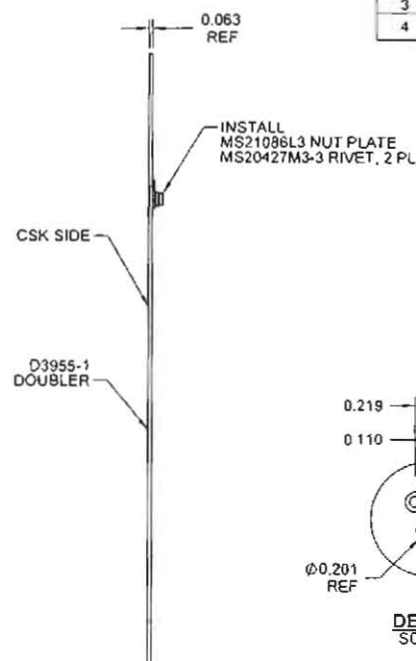
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 68214
AL 11-04-8



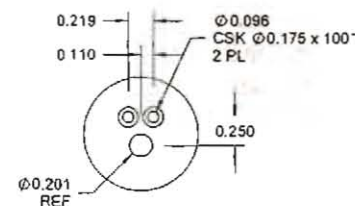
D3955-1 DOUBLER

D3955-1 NOTES

- 1) MATERIAL: 6061-T6 ALUMINUM, 0.063 THICK SHEET PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6S 063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART OSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY P/N "D3955-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.25 lbs



ITEM	QTY	P/N	DESCRIPTION
1	X	D3955-041	DOUBLER ASSY
2	1	D3955-1	DOUBLER
3	1	MS21086L3	NUT PLATE
4	2	MS20427M3-3	RIVET



DETAIL A D7-1
SCALE 2X

D3955-041 DOUBLER ASSEMBLY

RELEASED
09/07/21

A NEW ISSUE		RF	09.07.21
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.21		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. A
DRAWING NO.	D3955	SHEET 1 OF 5
TITLE	SKIDTUBE TUNING KIT	SCALE
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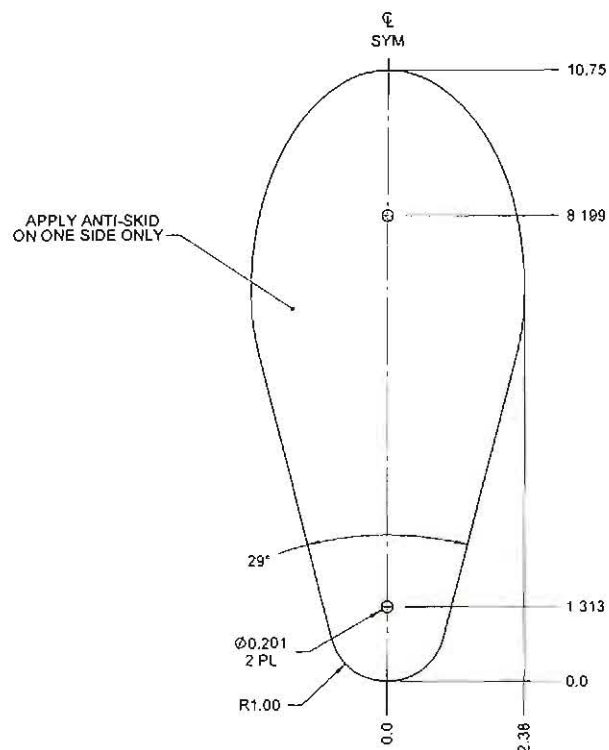
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3955-3 COVER PLATE

NOTES

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 0.060 (16 GA) THICK (REF DART SPEC. M304S16GA)
- 2) FINISH: BLACK ANTI-SKID PAINT PER DART QSI 005.4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-3" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.84 lbs

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3955	SHEET 2 OF 5
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9/12/21

w/o 68214

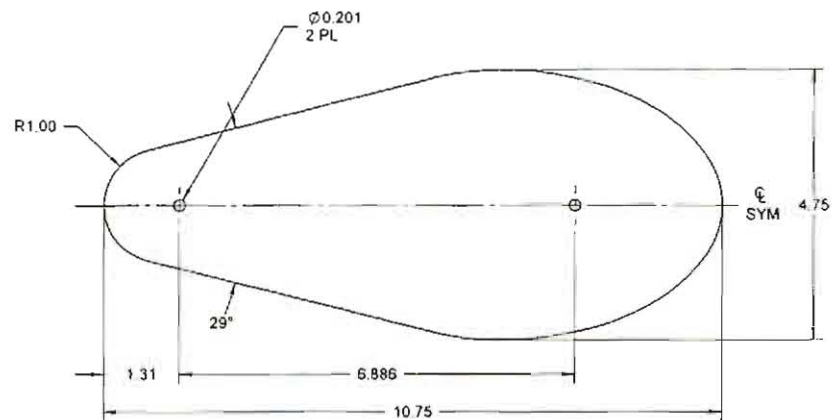
W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3955-X PLATE

General Table			
P/N	T (in)	T (GA)	WEIGHT (lbs)
D3955-5	0.060	16	0.64
D3955-7	0.120	11	1.28

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, T (GA) THICK (REF DART SPEC. M304STGA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: SEE TABLE

RELEASED
01/02/2010

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	1	DRAWING NO.	REV. A
MFG. APPR.	1	D3955	SHEET 3 OF 5
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DE APPR.	1	SKIDTUBE TUNING KIT	NTS
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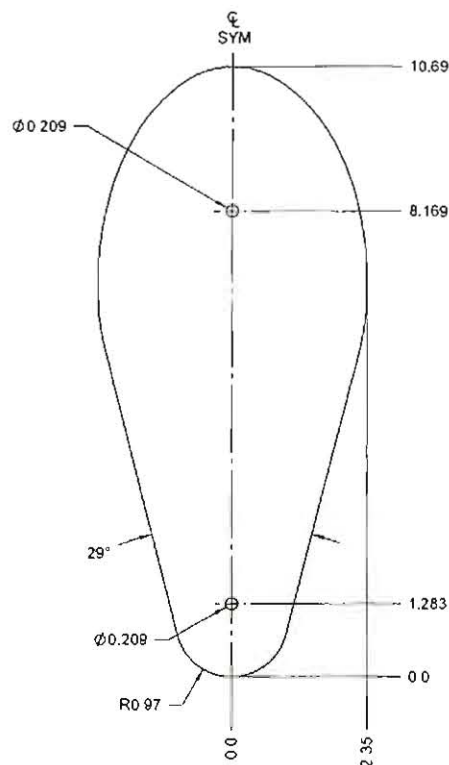
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3955-21 GASKET

D3955-21 NOTES:

- 1) MATERIAL: BLACK NEOPRENE SHEET, 0.063 THICK, 60 DUROMETER (REF. DART SPEC M-NEO60-S 063)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-21" USING YELLOW PAINT MARKER
- 7) WEIGHT: 0.08 lbs

RELEASED
28/07/22 NH

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO	REV. A
MFG. APPR.		D3955	SHEET 4 OF 5
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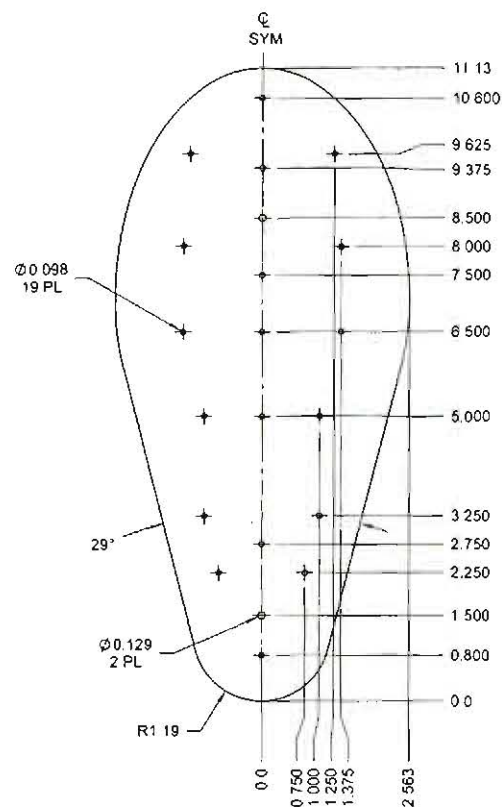
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



0.040 REF

WLO 48216



D3955-23 TEMPLATE

NOTES:

- 1) MATERIAL: 6061-T6 ALUMINUM, 0.040 THICK SHEET PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T8S.040)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-23" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.16 lbs

RELEASED
09/07/21

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3955	SHEET 5 OF 5
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W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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